



**STATE OF HAWAII**  
**WIRELESS ENHANCED 911 BOARD**

September 8, 2006  
10:00 a.m.

Department of Accounting and General Services  
Comptroller's Conference Room 410  
Kalanimoku Building  
1151 Punchbowl Street  
Honolulu, Hawaii 96813

**AGENDA**

- I. Call to order
- II. Review of Minutes for August 11, 2006 Board Meeting.
- III. Committee Updates by Chairs.
  - a. Finance Committee
  - b. Technical Committee
  - c. Policies and Objectives Committee
  - d. Administration Committee
- IV. PSAP Status Updates
  - a. Kauai
  - b. Oahu
  - c. Molokai
  - d. Maui
  - e. Hawaii
- V. Executive Director's Monthly Report
- VI. Discussion Items.
  - a. Establishing Public Relations/Marketing Committee
  - b. Establishing Trust Accounts for the PSAPs
  - c. County exempt purchases
- VII. Announcements
- VIII. Next meeting date and location
- IX. Adjournment

State of Hawaii  
Wireless Enhanced 911 Board

SUBJECT: Minutes of September 8, 2006 Meeting

Members in Attendance: Roy Irei, Gordon Bruce, Russ Saito, Joel Matsunaga, Dexter Takashima, Milton Matsuoka, Pete Jaeger, Jeff Yamane, and Paul Ferreira, (attachment 1). Milton Matsuoka was assigned the proxy for Richie Nakashima (attachment 2). John Cole's replacement as the Consumer Advocate has not yet been identified.

Staff in Attendance: Philip Kahue (Executive Director), Bill Doolittle (Technical Consultant), Tony Ramirez (PM for PSAPs), and Patricia Ohara (Deputy Attorney General).

Guests in Attendance: Clement Chan (PM for Oahu PSAPs).

1. The chair called the meeting to order at 10:00 a.m.
2. The minutes of the August 11, 2006 meeting were approved.
3. Committee Updates by Chairs
  - a. Finance Committee Report.
    - i. The Statement of Cash Flows shows the account balances for both the General Fund and the Grant Fund (attachment 3). End of month, August 2006 General Fund balance is \$13,181,310.72.
    - ii. End of month, August 2006 Grant Fund balance is \$916,469.19.
    - iii. Roy Irei suggested we obtain confirmation letters from T-Mobile and Cingular stating that they are not seeking reimbursement from the General Fund at this time. **ACTION ITEM: ED will send letters to T-Mobile and Cingular to confirm that they will not be seeking reimbursement from the General Fund at this time.**
    - iv. Roy also suggested that the Finance Committee determine remaining cost projections, then recommend to the Board whether the surcharge should be adjusted. **ACTION ITEM: Finance Committee to develop an assessment of what level of surcharge is required to support estimated expenses and other operational costs of the Hawaii Wireless E911 Board.**
    - v. Pete recommended that the Item Heading under the Grant Fund showing Nextel Deployment be changed to Maui PSAP Deployment.
  - b. Technical Committee Report (attachment 4).
    - i. Intrado Call Taker PSAP Training Update (attachment 5).
      1. There is no setup charge. Cost for training per day is \$1200. This includes as many training sessions that can be fit into one day at that location. A motion was made by Joel Matsunaga to allow the PSAPs to begin this training. The motion was seconded by Milton Matsuoka, and carried

- unanimously. Peter recommended that Intrado be informed to begin this training with Oahu PSAPs in late October.
2. As a follow-up action item, the Deputy Attorney General opined that the proposed overtime costs for PSAP call takers to attend this training could not be reimbursed by the General Fund, as stated in the Statute (HRS §138-5).
  3. **ACTION ITEM: ED will obtain number of training sessions required by each PSAP, then make the request to Intrado, as well as amend the Intrado contract to allow this training to occur.**
  4. The Board was envisioning establishing trust accounts for the counties, so that funds would be available for them to make purchases with allocated funds. **ACTION ITEM: ED will setup a meeting with Kerry Yoneshige, with Pat Ohara in attendance, to determine how to establish the Trust Accounts.** Gordon stated the IGA's between the City, State, and Federal PSAPs have not been established yet. **ACTION ITEM: Gordon will check to see if LT. Charles Chong (HPD) already asked the City Council for acceptance of grant funds to deploy the Oahu PSAP. If not, then a request will be made to accept grant funds for Oahu PSAPs. If PSAPs are considered public safety agencies, they may not need to establish IGAs with the Federal and State PSAPs.** A motion was made by Joel Matsunaga to set aside funds for Oahu PSAPs to purchase their GIS mapping system, with the remaining funds to be allocated to Kauai and Hawaii islands. The motion was seconded by Russ Saito and carried unanimously. Dexter Takashima then stated that Kauai was ready to purchase their mapping system for \$65,000. So the original motion was amended so that funds would be granted to PSAPs on a first come, first funded. The amended motion was made by Joel, seconded by Pete Jaeger, and carried unanimously.
  5. Roy stated that while they were testing the T-Mobile deployment for Maui, they found that Hawaiian Telcom only had domestic call back capability (to show 10 digit phone numbers) to provide call back numbers to the PSAPs. International phones display 12-digit phone numbers and Hawaiian Telcom cannot accommodate the extra digits at this time. Roy also stated that Hawaiian Telcom indicated that the current field size is in accordance with the E2 standard adopted by Hawaiian Telcom and other telephone companies.
  6. Trust Accounts should be established for each County. The counties need to establish trust accounts on their side to accept the funds. **ACTION ITEM: The ED will work with Kerry Yoneshige of DAGS ASO, and Pat Ohara to see what is required in the establishment of the trust accounts and the reporting requirements for accountability. If Memoranda of Agreement (MOA) need to be established with each County, we will determine what information is required in the MOA for each county.**
  7. Maui should issue a press release that they are the first island to be fully deployed for Phase II wireless enhanced 911 service for all carriers serviced

on their island. **ACTION ITEM: ED will work with Richie Nakashima to draft a press release.**

- c. Policies and Objectives Committee Report –John Cole’s replacement has not yet been identified. **ACTION ITEM: Russ Saito will check with DCCA to see if someone has been identified to replace John Cole.**
- d. Administration Committee Report – Nothing to Report.

4. PSAP Status Updates.

- a. Kauai – CAD vendor performed an upgrade today, and Dexter will provide an update to the board. If the CAD issues are fixed, then they will be able to send out the Request for Service (RFS) Letters to the wireless carriers in October.
- b. Oahu
  - i. Last monthly meeting with the PSAPs occurred on August 31<sup>st</sup>. It appears MobiPCS will be the first to test. Most of the wireless carriers have already ordered their trunking to the PSAPs.
  - ii. Positron has their kickoff meeting on September 12, 2006.
  - iii. Gordon Bruce also mentioned that the major issue at hand is still centered on obtaining the funding to purchase the mapping system. They have two military PSAPs, State PSAP (EMS), and two City PSAPs (HFD and HPD).
- c. Molokai – RFS Letters have not been sent out yet. But Mr. Takeshita expects Phase II service to be available on Molokai by mid-October.
- d. Maui
  - i. Sprint testing should be completed by the end of next week. They are the last carrier, and if successful, Maui will be 100% deployed for Phase II service for all carriers.
  - ii. There are trunking issues with Verizon on Lanai. When completed, the testing should be very quick.
- e. Hawaii
  - i. Hawaii County will be sending someone to the Positron kickoff meeting on Oahu on September 12<sup>th</sup>. Preliminary GIS mapping system for Hawaii is \$460,000.
  - ii. Paul also thanked Tony Ramirez for meeting with the PSAP staff on the Big Island last week.
  - iii. Paul asked about verification of tower locations, and Bill Doolittle stated that it was a wireless carrier responsibility to verify the tower locations.
  - iv. Paul also asked what was required to request more services of Tony for their PSAP. Russ stated that board approval was not needed, that the Finance Committee can decide to approve the request. Paul will need to make the request through Akimeka for the additional services. **ACTION ITEM: PM will draft a request letter for PSAPs to request his services.**

5. Executive Director’s Report – (attachment 6) – Reports filed last month, and upcoming reports were highlighted.

- a. ED provided a synopsis of the different Emergency organizations (attachment 7) and recommended that a Board Member join NASNA, but not NENA or APCO. NENA and APCO are geared toward professional development of PSAP managers and directors. The Board decided that the ED would be the Board representative to the NASNA organization. The motion was made by Joel Matsunaga, seconded by Russ Saito, and carried unanimously.
- b. Cost Projections from PSAPs and Wireless Carriers. (attachment 6, paragraph 5c). The cost projections received so far are from Hawaii and Maui County (PSAPs); and Nextel, T-Mobile, Sprint, and Verizon for the wireless carriers. We are awaiting cost projections from Oahu and Kauai for the PSAPs, and Mobi PCS for the wireless carriers. Dan Youmans from Cingular stated that they have been self-recovering for their deployment costs and would not be seeking reimbursement for their non-recurring costs, but left the door open for future recurring costs. The total Non-recurring and annual recurring costs projected so far equate to \$2,857,549.

## 6. Discussion Items

- a. Tony Ramirez provided a recommendation paper (attachment 8) based on his attendance at the ESRI Conference in early August. Pete made a motion to add Tony's recommendations as an agenda item to the next Board meeting. It was seconded by Gordon, and carried unanimously. Tony also made the recommendation that Akimeka could be utilized to make purchases on behalf of the PSAPs, as part of its services to the Board. This item will need to be researched further to see if it is a viable option.
- b. Wireless Enhanced 911 Website. Akimeka will make the following changes: Select a domain name that has a ".gov" suffix, as well as, an easier to locate nomenclature such as "hawaiiwireless911" or just "wireless911".
- c. A motion was made by Joel to establish a Public Relations/Marketing Committee will be chaired by the ED, with members Roy, Russ, Gordon, Paul, Richie, Milton, and Dexter. This was seconded by Paul and carried unanimously. **ACTION ITEM: ED to establish first committee meeting and finalize a press release for Maui 100% deployment. Then draft a press release highlighting the establishment of the website as a follow-on release.**

## 7. Action Items.

- a. **Oahu PSAP Representative:** Check to see if LT. Charles Chong (HPD) already asked the City Council for acceptance of grant funds to deploy the Oahu PSAP. If not, then a request will be made to accept grant funds for Oahu PSAPs.
- b. **Comptroller:** Check with DCCA to see if someone has been identified to replace John Cole.
- c. **Finance Committee:** Develop an assessment of what level of surcharge is required to support estimated expenses and other operational costs of the Hawaii Wireless E911 Board.
- d. **Executive Director:**
  - i. Send letters to T-Mobile and Cingular to confirm that they will not be seeking reimbursement from the General Fund at this time.

- ii. Obtain number of training sessions required by each PSAP, then make the request to Intrado, as well as amend the Intrado contract to allow this training to occur.
- iii. Setup a meeting with Kerry Yoneshige, with Pat Ohara in attendance, to determine how to establish the Trust Accounts.
- iv. Work with Richie Nakashima to draft a press release on Maui's 100% deployment of Phase II wireless enhanced 911 service.
- v. Establish first public relations/marketing committee meeting and finalize a press release for Maui 100% deployment. Then draft a press release highlighting the establishment of the website as a follow-on release.
- vi. Draft letters of recognition for Jayne Nantkes and Clement Chan.
- e. **PM for PSAPs:** Draft a request letter for the PSAPs to request his services.

8. Announcements.

- a. Pete Jaeger recommended a Letter of Recognition to Jayne Nantkes of Hawaiian Telcom, for her work in getting the Hickam PSAP its Federal ID number.
- b. Pete Jaeger also recommended a Letters of Recognition be drafted for Clement Chan for all of his hard work in preparing the Oahu PSAPs for deployment.

**ACTION ITEM: ED will draft letters of recognition for Jayne Nantkes and Clement Chan.**

- c. Pete Jaeger volunteered the Technical Committee to provide synopsis on how future technology could be addressed and potentially how the money in the fund can be expended.
- d. Gordon mentioned that the GIS mapping system being considered will have information on all fire hydrant locations and their status, which can be a valuable source of information to the fire departments.

9. The next meeting scheduled for October 13, 2006 at the same location (DAGS Comptroller Conference Room).

10. The meeting was adjourned at 12:30 p.m.

**Wireless Enhanced 911  
Board Meeting  
September 8, 2006 – 10:00 a.m.  
Department of Accounting and General Services  
Comptroller's Conference Room 410  
1151 Punchbowl Street, Honolulu, HI 96813**

Name	Agency	Phone
1. Bill DODDLETT	911 INSIGHT	[REDACTED]
2. Jeffrey Palashina	Hawaii Police Dept	[REDACTED]
3. MILTON MATSUOKA	MAUI COUNTY P.D.	[REDACTED]
4. Pam Ferreira	H.I. County P.D.	[REDACTED]
5. <del>GORDON</del> BRUCE	C&C DIT	[REDACTED]
6. Clement Chan	C&C DIT	[REDACTED]
7. Tony Ramirez	AKIMEKA	[REDACTED]
8. Roy Inei	T-Mobile	[REDACTED]
9. Pete Joergen	SPRINT/nextel	[REDACTED]
10. Jeff YAMANE	CINGULAR	[REDACTED]
11. Russ K. Saito	State - DAGS	[REDACTED]
12. JIM MATSUNAGA	HAWAII TELCOM	[REDACTED]
13. Philip Kahwe	Akimoka Tech	[REDACTED]
14.		
15.		
16.		
17.		
18.		
19.		
20.		

**Philip Kahue**

**From:** Richie M. Nakashima [Richie.Nakashima@akimekatech.com]  
**Sent:** Monday, August 28, 2006 1:28 PM  
**To:** Philip Kahue; Irei, Roy  
**Cc:** Milton M. Matsuoka  
**Subject:** RE: Next Board Meeting, Sep 8th

I will be out of state from September 5 - 9th. Milton Matsuoka will serve as my proxy vote. Thanks.

**From:** Philip Kahue [mailto:pkahue@akimekatech.com]

**Sent:** Monday, August 28, 2006 10:15 AM

**To:** Bill.Doolittle; Clement Chan; Dexter Takashima; Gordon Bruce; Jeff Yamane; Joel Matsunaga; John Cole; Kerry Yoneshige; Milton Matsuoka; Patricia Ohara; Paul Ferreira; Pete Jaeger; Richie M. Nakashima; Roy Irei; Russ Saito; Tony Ramirez

**Subject:** Next Board Meeting, Sep 8th

Board Members, this is a reminder that our next board meeting is scheduled for Friday, September 8<sup>th</sup> at the same time and location.

Attached are the minutes from the August 11<sup>th</sup> Board Meeting. I have also included in this email the action items from the last meeting.

**Action Items.**

- a. **Technical Committee Chair:** Ask Intrado to resubmit their proposal with costing data, showing how much it will charge per day for setup, basic and "train the trainer" training, with an additional per unit cost of training charge.
- b. **Comptroller:** Check with DCCA to see if someone has been identified to replace John Cole.
- c. **Executive Director:**
  - i. Verify that Web Cash Management Site is available for board member to use.
  - ii. Check with Deputy Attorney General if overtime costs associated with PSAP training provided by Intrado will be covered as a reimbursable expense.
  - iii. Draft a request letter to amend Intrado contract to provide "train the trainer" training for the call takers of the PSAPs.
  - iv. Draft letter of appreciation from Board to Maui County PD for Mr. Takeshita's assistance to the Oahu PSAP.
  - v. Obtain and pass on to Hawaii County the contact information for wireless carriers, so they can send Request for Service Letters.
  - vi. Draft a press release on projected PSAP deployment schedules.
  - vii. Work with Deputy Attorney General and representative designated by Comptroller to establish a trust account for PSAPs to purchase required items for deploying Phase II wireless enhanced 911 service.
  - viii. Provide recommendations to board on benefits of membership and participation in various organizations tied to public safety and enhanced 911 service.
  - ix. Draft a press release notifying public when Wireless Enhanced 911 website becomes live.
  - x. Add agenda item to next board meeting to address issue of establishing a public relations/marketing committee.

Also included is the draft agenda for the September 8<sup>th</sup> meeting. For those board members requiring parking passes, please let me know as soon as possible if you will be attending the meeting so that I can obtain the correct number of parking passes.

9/12/2006

Attach 2

Mahalo, Phil

**Philip Kahue, CHE**  
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*Honolulu, HI 96814*  
*808.265.3028*  
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9/12/2006

**HAWAII WIRELESS ENHANCED 911 BOARD**  
**STATEMENT OF CASH FLOWS**  
**For month ending 31 Aug 06**

**FIRST HAWAIIAN BANK ACCOUNTS:**

General Fund ITEM	Beginning Balance	Net Change	Ending Balance
<b>Cash Inflow:</b>			
Surcharge Collection	\$ 12,301,753.26	\$ 746,939.06	\$ 13,048,692.32
Interest Income	\$ 339,441.71	\$ 43,387.26	\$ 382,828.97
<b>Subtotal Cash Inflow</b>	<b>\$ 12,641,194.97</b>	<b>\$ 790,326.32</b>	<b>\$ 13,431,521.29</b>
<b>Cash Outflow:</b>			
PSAP Reimbursement	\$ (123,355.55)		\$ (123,355.55)
Board Member Travel Expense	\$ (9,892.41)	(443.61)	\$ (10,336.02)
Consultant-Akimeka	\$ (107,131.15)		\$ (107,131.15)
Audit Expense	\$ (7,825.00)		\$ (7,825.00)
Board Strategic Planning Expenses	\$ (1,562.85)		\$ (1,562.85)
<b>Subtotal Cash Outflow</b>	<b>\$ (249,766.96)</b>	<b>\$ (443.61)</b>	<b>\$ (250,210.57)</b>
<b>Totals</b>	<b>\$ 12,391,428.01</b>	<b>\$ 789,882.71</b>	<b>\$ 13,181,310.72</b>

Grant Fund ITEM	Beginning Balance	Net Change	Ending Balance
<b>Cash Inflow:</b>			
Nextel Contribution	\$ 1,250,000.00		\$ 1,250,000.00
<b>Cash Outflow:</b>			
Consulting Expense (Intrado)	\$ (131,500.00)		\$ (131,500.00)
Maui Reception Expense	\$ (2,073.64)		\$ (2,073.64)
Nextel Deployment	\$ (199,957.17)		\$ (199,957.17)
<b>Subtotal Cash Outflow</b>	<b>\$ (333,530.81)</b>	<b>\$ -</b>	<b>\$ (333,530.81)</b>
<b>Totals</b>	<b>\$ 916,469.19</b>	<b>\$ -</b>	<b>\$ 916,469.19</b>

**HAWAII WIRELESS ENHANCED 911 BOARD**  
**STATEMENT OF CASH FLOWS**  
**For month ending 31 Aug 06**

Narrative (General Fund):

1. No Reconciliation issues.
2. Routine Activity - Revenue reflects interest earned and surcharge collections.
3. Advised Board Members, who are authorized to signed checks on the General and Grant Funds, on how to access both funds to facilitate their oversight responsibilities, i.e., verifying the reasonability of the account balances.
4. We have also initiated online capability through FHB's Web Cash Manager to release payments, electronically, to vendors by authorized Board members.

Narrative (Grant Fund):

No Activity for the month.

Hawaii Enhanced 911 Board Meeting  
Technical Committee Report- Pete Jaeger Chairman

Sept 8, 2006

1. **PSAP training**– Intrado proposal follow up.
  - a. Intrado proposes three levels of training
    - Basic training
    - Basic training + train the trainer
2. **Wireless Deployment updates**
  - a. **Maui**- Nextel, Cingular, Verizon, done.  
Still pending Sprint- scheduled for a CDMA system test 7<sup>th</sup>. If successful, drive testing, anticipated completion by 9/15.  
T-Mobile completed their preliminary profile testing on 9/1. Deployment testing started (9/7) and continues as needed.
  - b. **Honolulu** – request letters sent July 25.
    - ✚ Positron picked as the Mapping standard for Hawaii
    - ✚ Demonstration on Sept. 12.
    - ✚ All three Honolulu PSAPS meeting monthly with Wireless carriers to drive the process
    - ✚ All Carriers are in the trunk ordering and data gathering phase. Mobi has completed their trunk order.

Respectably submitted by Pete Jaeger

Attach 4

## **HI Stage 2 Proposal for training services not specified in current SOW between HI Wireless Board and Intrado**

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### **Purpose**

This document outlines a proposal by Intrado for professional services not specified in the current Scope of Work between the Hawaii Wireless E9-1-1 Board and Intrado for Oahu PSAPs, in preparation for implementation of Wireless Phase II services.

### **City and County of Honolulu / Oahu PSAPs Training Program**

The Oahu PSAPs deployment team has requested that Intrado develop and deliver a training program for wireless operations in the PSAP. Intrado's proposal is that the program would specifically detail:

- how wireless 9-1-1 call flow works,
- how to recognize various details of incoming wireless 9-1-1 calls,
- how to identify and trouble-shoot various system problems or failures in the delivery of wireless 9-1-1 calls, and
- additional training issues identified by the PSAP team which are critical for their understanding of how to effectively manage incoming wireless 9-1-1 calls.

This training program, at the Board's request, could also easily be delivered to all other PSAPs in the State as well.

### **Training Service Level Options**

Intrado envisions three possible service level options for the above described training program.

**Service Level 1 – Basic Training**

<b>Deliverable</b>	<b>Description</b>	<b>Component Cost</b>
Development of presentation	Describes wireless E9-1-1 call flow for Hawaii, what information is presented in the E9-1-1 call in the specific HI format, how to interpret each of the data components, what issues can happen that result in problems for 9-1-1 data delivery, and how to report problems.	\$150/hr prep time, estimated 2 days effort, or flat rate of \$2,400 (whichever option you prefer)
Training materials	Intrado will provide electronic copies of training presentations and handouts developed specifically for the classes.	Included with development cost
Training presentation	On-site presentation of training class. Price is given at "preferred-customer" full daily rate. Intrado personnel will deliver as many classes per day as can be scheduled.	\$1,200 per day
Travel expenses	Travel time plus actual travel and lodging expenses to/from Honolulu. (Daily expense includes lodging, car rental, meals, and other incidentals.)	<ul style="list-style-type: none"> <li>• Travel time = \$1,200</li> <li>• Airfare – approximately 650</li> <li>• Daily expenses – approximately 400 per day</li> </ul>
Level 1 Total Estimate	Total including 1 day of training presentations	\$7,850
	Total including 2 days of training presentations	\$9,450
Option for Additional PSAPs <sup>1</sup>	Training for additional PSAPs may be added to this service level at the full day training presentation rate plus related travel expenses. (No additional development fees.)	\$1,200 per day of on-site training plus travel expenses

<sup>1</sup> **Note:** Additional PSAP training rate is on the assumption that on-site training presentations will be made during the same trip to Hawaii as for Oahu PSAPs. If a separate trip to the State is required, then additional travel fees will apply as applicable.

**Service Level 2 – Train-the-trainer Training**

<b>Deliverable</b>	<b>Description</b>	<b>Component Cost</b>
Development of presentation	Same as Service Level 1 plus speaker notes	\$150/hr prep time, estimated 4 days effort, or flat rate of \$4,800 (whichever option you prefer)
Training materials	Intrado will provide electronic copies of training presentations and handouts developed specifically for the classes.	Included with development cost
Training presentation	On-site presentation of training class. Price is given at "preferred-customer" full daily rate. Intrado personnel will deliver as many classes per day as can be scheduled.	\$1,200 per day
Travel expenses	Travel time plus actual travel and lodging expenses to/from Honolulu. (Daily expense includes lodging, car rental, meals, and other incidentals.)	<ul style="list-style-type: none"> <li>• Travel time = \$1,200</li> <li>• Airfare – approximately 650</li> <li>• Daily expenses – approximately 400 per day</li> </ul>
Level 2 Total Estimate	Total including 1 day of training presentations	\$10,250
	Total including 2 days of training presentations	\$11,850
Option for Additional PSAPs <sup>2</sup>	Training for additional PSAPs may be added to this service level at the full day training presentation rate plus related travel expenses. (No additional development fees.)	\$1,200 per day of on-site training plus travel expenses

**Service Level 3 – Self-Paced Tutorial with Video and Audio**

<b>Deliverable</b>	<b>Description</b>	<b>Component Cost</b>
Development of presentation	Customized self-paced tutorial delivered on CD to include video and audio presentation of topics described above plus additional information to be determined with PSAP Operations team.	Estimated 4 weeks development time. Let us know if you want a price quote on this.
Training materials	Intrado will provide electronic copies of training presentations and any other materials developed specifically for the classes.	Included with development cost

The above options are provided to the Hawaii E9-1-1 Wireless Board for budgetary purposes. More exact costs will be determined when the Board directs Intrado as to which option or combinations of options they choose.

<sup>2</sup> **Note:** Additional PSAP training rate is on the assumption that on-site training presentations will be made during the same trip to Hawaii as for Oahu PSAPs. If a separate trip to the State is required, then additional travel fees will apply as applicable.

State of Hawaii  
Wireless Enhanced 911 Board

Executive Director's Monthly Report  
September 8, 2006

1. Reports Filed
  - a. Quarterly – August 15: PSAP Readiness Grant Fund
  - b. Annual - August 31: Biennium/Supplemental Budget Request
2. Inquiries – Deborah Edelson of Wolters Kluwer, a multimedia, tax publishing, and market research firm; asking if the surcharge was still 66 cents.
3. Upcoming Reporting Requirements
  - a. Quarterly - ~~August 15: PSAP Readiness Grant Fund~~ None
  - b. Annual – September 30: ~~PSAP Readiness Grant Fund~~ Audit Report.
  - c. Other – None
4. Fund Activity – covered in Finance Chair update
5. Action Items.
  - a. Establishing trust accounts for the PSAPs
  - b. Emergency Response and Public Safety Organization Synopsis
  - c. Cost Projections to Date: \$2,857,549
    - i. Nonrecurring: \$929,805
    - ii. Annual Recurring: \$1,927,744

PSAP or WSP	Nonrecurring	Annual Recurring	Total NRC & ARC
Hawaii	\$467,000	\$206,960	\$673,960
Maui	\$300,000	\$222,240	\$522,240
Molokai	TBD	\$55,560	\$55,560
Kauai	TBD	\$111,120	\$111,120
Oahu - HPD	TBD	\$555,600	\$555,600
Oahu - Hickam	TBD	\$138,900	\$138,900
Oahu - Pearl	BDTD	\$222,240	\$222,240
Nextel	\$23,975	\$84,426	\$108,401
Sprint	\$97,130	\$75,974	\$173,104
Verizon	\$41,700	\$254,724	\$296,424
T-Mobile	\$0	\$0	\$0
Cingular	\$0	TBD	TBD
Mobi PCS	TBD	TBD	TBD
	\$929,805	\$1,927,744	\$2,857,549

Attach 6

## Synopsis of Emergency Response Organizations

### NASNA – National Association of State 9-1-1 Administrators

- a. Annual Dues: \$100
- b. Meetings: Three per year at various locations, at least one in conjunction with the NENA (National Emergency Number Association) Annual Conference.
- c. Membership: Single State government representative (or equivalent) to represent their state. They prefer not to have “Industry” representatives as State representatives. There are currently 23 state 9-1-1 representatives. They also have an email list server that permits access to information exchange in a virtual environment.
- d. Charter: To facilitate the sharing of information between states and with other groups on FCC, legislative, regulatory, and technological issues that affect the 9-1-1 Emergency Response System.

### NENA – National Emergency Number Association

- a. Annual Dues: \$95
- b. Meetings: One annual conference, and multiple chapter conferences.
- c. Membership: More than 7,000 members and 46 chapters (Hawaii does not have a chapter). They produce a trade journal 9 times a year, and sponsor multiple courses for members.
- d. Charter: To foster the technological advancement, availability and implementation of a universal emergency telephone number system (9-1-1). It promotes research, planning, training and education of 9-1-1 managers on the latest technologies and business practices.

### APCO International – Association of Public Safety Communications Officials – International

- a. Annual Dues: \$62
- b. Meetings: One annual conference (varying cities), and multiple regional conferences. Annual 2006 conference was held in Orlando, Florida on August 6-10, 2006. The next annual conference will be held in Baltimore, MD on August 5-9, 2007.
- c. Membership: More than 15,000 members and 49 Chapters and affiliates (Hawaii does not have a chapter).
- d. Charter: Provide professional development and education for public safety communications personnel. Provides licensing boards, committees, research and special projects for the advancement of public safety.

Notes: NASNA website only has links to NENA and APCO. The NENA and APCO websites do not have links to any other outside agencies.

State of Hawaii  
Wireless Enhanced 911 Board

SUBJECT: Environmental Systems Research Institute (ESRI) Conference; San Diego, California August 7-11, 2006

**Background**

The primary function of ESRI is to design and develop leading Geographical Information Systems (GIS) and to compile and disseminate information on those systems. The conference in San Diego was typical of other conferences with regard to vendor booth displays, courses, on site assistance and information and the opportunity to network with industry personnel.

During the Public Safety Answering Point (PSAP) mapping demonstrations conducted on Oahu, Mr. Tony Ramirez (PSAP Project Manager) and Mr. Tommy Takeshita (PSAP Manager, Maui Police Department) discussed the conference and determined the best use of time to pass by the application courses and concentrate on the exhibit pavilion. This time would also be utilized to conduct a one-on-one interview with Mr. Takeshita and discussed the lessons learned during the Maui deployment of the wireless E-911 system on Maui.

**Maui County Preparation**

During the interview Mr. Takeshita had discussed that preparation was vital to the success of the wireless E-911 deployment in Maui. Maui County had been preparing their mapping data for a five year period prior to requesting wireless E-911 services and had established a foundation for their preferred mapping solution. Prior to the selection of a mapping vendor, Maui County had developed approximately 50 layers of mapping information.

The mapping vendors generally utilize mapping information provided to them by the using agency and through coordination with the local GIS facility servicing that area. Unless contracted to do so, vendors generally will not update or produce new layers of mapping data. The theme utilized by Maui County was to produce "good data" to avoid liability potential liability issues. Mr. Takeshita emphasized that "no data is better than bad data" several times during the interview. A GIS professional, either provided by the county or even a new resource should be acquired and dedicated to the mapping development of each county during the wireless E-911 deployment. This resource should work closely with the PSAP Manager to develop new mapping data and update/refresh existing data necessary for their operation. It is recommended this resource be identified and staffed at the earliest time possible.

Comparisons between the mapping data and CAD data must also be performed to ensure the tables and ranges are consistent for the mapping data. The use of aliases was adapted for locations such as parks and community areas without proper street addresses. Mr.

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Takeshita also developed an alias code to properly identify locations on major highways utilizing the existing mile markers. A similar or even the same alias system is recommended for implementation in the other counties in order to establish a common standard throughout the State of Hawaii.

Regular maintenance of the mapping information is also a concern. New updates must be processed daily in order to keep up with the continuously changing dynamics of Maui County. It was also recommended by Mr. Takeshita that mapping maintenance and updates be considered as part of their mapping solution procurement for all PSAP managers.

It is a given the purpose of wireless 911 location information is to direct responders. Currently Phase 0 calls are process by the call taker who typically utilizes graphical and landmark features (e.g., intersections, block ranges [a block is typically 500']) to guide police and fire/EMS. Under the new requirements of Wireless Phase II, information from the caller's location will be sent to the PSAP by the means of a Latitude and Longitude (Lat/Long) location. One must remember a one (1) minute variance in a Lat/Long of the tower location could throw the data/plotting information off by approx. 1852 meters or 6,076 Ft. Even as much a one (1) second variance in Lat/Long from the tower can cause a discrepancy in the data by 30.86 meters or 101.26 Ft. Since the distance measurements are being derived from the Wireless Service Providers equipment located at the cell towers, it is the most logical point to baseline the reference point.

In order to meet the accuracy requirements for mapping wireless 911 calls (i.e., network-based solutions: 100 meters for 67 percent of calls, 300 meters for 95 percent of calls; handset-based solutions: 50 meters for 67 percent of calls, 150 meters for 95 percent of calls), reference points for the data being transmitted must be established in order to accurately plot the data being received and transmitted from the cell tower once it is received at the PSAP for map plotting purposes.

### **Interoperability and Integration**

The Association of Public-Safety Communication Officials (APCO) and National Emergency Number Association (NENA) have envisioned a nationwide interoperable E-911 system and have established goals to achieve this within a 20 to 25 year period. In order to accomplish this, the State of Hawaii should consider a migration strategy for a statewide interoperable system. A migration strategy could be accomplished in a five to seven year period. The benefits of a statewide interoperable system would greatly enhance the public safety response time for the people of Hawaii and provide long term cost reductions with regard to the operation and maintenance of the system.

In an effort to meet the current accelerated implementation schedule for the Wireless Enhanced 911 deployment, it is recommended the PSAP managers procure a mapping solution that is compatible with their current Computer Aided Dispatching (CAD) systems and the ANI/ALI data delivery system currently in use by the 911 service provider (Hawaiian Telecom) and ensure complete interoperability and compatibility on a

County wide basis. There are three basic courses of actions for the PSAP Managers to consider when procuring their mapping solution:

COA #1: Integrated CML mapping solution- the E-911 Service provider utilizes a CML/Plant solution to deliver ANI/ALI information to the PSAP. Procurement of a mapping solution from the E-911 service provider would provide a system that is fully integrated with the CML/Plant solution. This solution will cause the least amount of integration and interoperability concerns and provide a roadmap for all PSAP mapping solution to be on an integrated common platform utilized throughout the State of Hawaii.

COA#2: Integration of independent vendors mapping solution- Integration of a mapping solution will present its fair share of challenges for the PSAP Managers. Coordination with the E-911 service provider, the CAD vendors and the mapping vendor must be conducted to ensure interoperability. Items of concern will be integration efforts with the disparate Intellectual Property Rights (IPR) and Application Protocol Interfaces (API) of the different systems. Since the PSAP(s) throughout Hawaii utilize different CAD systems, no common interface solution is available. Each PSAP and County system will still require an individual approach.

COA#3: Procurement of independent CAD mapping solutions- PSAP Managers have an option to procure the mapping solutions from their CAD vendors. Coordination with the E-911 service provider must still be accomplished and integration efforts with Intellectual Property Rights (IPR) and Application Protocol Interfaces (API) will still be a concern for those Counties with different CAD solutions at the different PSAP locations (i.e. Honolulu County). Although procurement of the CAD vendors mapping solution may provide an integrated solution, the mapping products generally are not as robust as those identified in COA(s) 1 & 2 and do not promote interoperability and integration with alternate dispatch points unless they are utilizing the same CAD system and mapping solution. This course of action is not recommended.

Regardless of the COA listed above, the recommended hard drive storage requirement at each E-911 dispatch point will increase to between 9 to 15 Gigabits for their mapping data and mapping layers. The most cost effective means to handle this requirement is for the PSAP Manager to consider the procurement of external hard drives dedicated for the storage of mapping information.

A discussion with the E-911 Service provider (Ms. Jayne Nantkiss) has confirmed there is no pending/ scheduled hardware upgrades to the current CML system currently the ANI/ALI data streams. PSAP Managers are highly encouraged to contact the E-911 service provider to discuss the integration and interoperability of any new or modified subsystem added to the E-911 architecture in Hawaii.

**State of Hawaii PSAP Deployment Project Manager**

During the interview, Mr. Takeshita was asked what assistance might be necessary by the other PSAP Managers to ensure a successful Wireless E-911 implementation. Based on his experience and Lessons Learned from the Maui implementation, mapping efforts should be considered a separate but parallel effort in connection with the Wireless E-911 deployment.

The following list of items was identified above and beyond simple telephonic coordination with the PSAP Managers:

- Assist the PSAP Managers with Integration/Interoperability concerns:
  - Coordination with CAD vendors
  - Coordination with E-911 service provider
  - Coordination with mapping solution providers
- Assist with GIS mapping/data comparison of data tables
- Assist with GIS and CAD mapping comparisons.
- Assist with Call Routing Sheets
- Assist with the establishment of an Alias standard
- Perform the verification of Cell Tower locations
  - Street addresses and aliasing
  - Identification of cell tower Lat/Longs
- Perform verification of mile markers on the highway

The following list of items was identified above and beyond simple telephonic coordination by the Enhanced E-911 Board:

- Development of PSAP Managers checklist
- Development and maintenance of deployment schedules (Work Breakdown Schedules (WBS))
- Development and maintenance of Status Reports
  - County Level
  - State of Hawaii Level

### **Recommendations**

1. The Wireless Enhanced 911 Board defer any decision to suspend or reduce the \$0.67 surcharge for wireless E-911 service until all interoperability and integration issues are addressed for the PSAP locations with regard to the wireless E-911 implementation.
2. The Wireless Enhanced 911 Board allows the PSAP(s) to procure mapping solutions that provide an integrated approach on a County basis to ensure interoperability in the event alternate dispatching is required.
3. The Wireless Enhanced 911 Board allows PSAP Manager's to conduct an analysis and determine the requirement for external computer hard-drive storage capacity to store mapping data and then procure and implement the external hard-drives.

4. The Wireless Enhanced 911 Board makes a recommendation to the legislature to develop a long term statewide migration strategy to place all PSAP(s) on a statewide interoperable CAD/enterprise mapping solution for Wireless E-911 services and determine an appropriate time frame. The County of Kauai is recommended to be the starting point for the migration strategy.
5. The Wireless Enhanced 911 Board coordinates with the PSAP managers from the different counties and develops standards for the implementation of the mapping solutions. The County PSAP managers and GIS representative should be given a choice to either perform the necessary duties utilizing County resources or to request from the Wireless Enhanced 911 Board to acquire services of GIS professionals to assist the development of necessary GIS tools, resources, and personnel to provide accurate Wireless E-911 services.
6. The Wireless Enhanced 911 Board allows the Counties to perform or acquire the services of field surveying personnel to verify cell tower locations (and potentially highway markers) by taking actual GPS readings and plotting the location information on maps (or layers).
7. The Wireless Enhanced 911 Board consider increasing the hours of the PSAP deployment project manager and the technical consultant in order to assist the PSAP managers manage/implement the deployment and coordination of the mapping efforts for the wireless E-911 mapping solution and additional duties beyond coordination efforts for the PSAP managers. It is further recommended that the Counties be authorized to procure necessary copies, licenses and training for Microsoft Project software for the tracking and management of the Wireless 911 deployment.